



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

✓

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,060	05/05/2004	Peter Deak	10069/2012	6647
29933	7590	12/16/2005	EXAMINER	
PALMER & DODGE, LLP KATHLEEN M. WILLIAMS 111 HUNTINGTON AVENUE BOSTON, MA 02199			SGAGIAS, MAGDALENE K	
		ART UNIT		PAPER NUMBER
				1632

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/840,060	DEAK ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Magdalene K. Sgagias	1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-34 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
Paper No(s)/Mail Date: _____.	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

1. Claims 1-34 are pending.

***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 27, drawn to a method of treating cancer in an individual, comprising administering a polynucleotide, classified in class 514, subclass 44.
  - II. Claims 1-2, 28, drawn to a method of treating cancer in an individual, comprising administering a polypeptide, classified in class 514, subclass 2.
  - III. Claims 3 and 30, drawn to a method of identifying a substance which binds to a polypeptide, classified in class 424, subclass 9.1.
  - IV. Claims 4 and 31, drawn to a method of identifying a substance which modulates the function of a polypeptide and wherein determining a change in the activity of said polypeptide, classified in class 424, subclass 9.1.
  - V. Claim 5, drawn to a method of diagnosis a cancer in an individual, with a probe comprising of at least 15 nucleotides of a polynucleotide, classified in class 435, subclass 4.
  - VI. Claim 6, drawn to a method of diagnosis a cancer in an individual, with an antibody, classified in class 435, subclass 4.
  - VII. Claims 7-8, drawn to a method of modulating the expression of a polynucleotide in a cell comprising introducing a dsRNA which hybridizes to said polynucleotide, classified in class 435, subclass 6.

- VII      Claims 7-8, drawn to a method of modulating the expression of a polynucleotide in a cell comprising introducing an antisense RNA which hybridizes to said polynucleotide classified in class 435 subclass 6.
- VIII.     Claims 9-18, 22-23 and 25, drawn to polynucleotide and a method of identifying said polynucleotide, classified in class 435 subclass 6.
- IX.      Claims 19-21, 24 and 26, drawn to polypeptide and a method of identifying the polypeptide with an antibody, classified in class 424, subclass 7.2.
- X.        Claim 29, drawn to a method of antibody treatment, classified in class 424, subclass 130.1.
- XI        Claims 32-34, drawn to a method of identifying a human nucleic acid sequence, by selecting a Drosophila polypeptide identifying a corresponding human polypeptide and identifying a nucleic acid encoding the human polypeptide, classified in class 435, subclass 6.

3.       The inventions of groups I and II are patentably distinct because they are drawn to methods for treating an individual with cancer that have distinct steps, requires separate compositions for practice and produce different results. For example, the steps of polynucleotide treatment cannot be used in a polypeptide treatment.

The inventions of groups I, II and III, IV are patentably distinct each from the other because they are drawn to methods that have distinct steps, require separate compositions for practice and produce different results. For example, the steps required for treating an individual with cancer using a polynucleotide or a polypeptide cannot be used for identifying a substance

which binds to a polypeptide or identifying a substance which modulates the activity of a polypeptide.

The inventions of groups I-IV and V-VI are patentably distinct because they are drawn to methods that have distinct steps, require separate compositions for practice and produce different results. For example, the steps required for treating an individual with cancer or identifying a substance cannot be used for diagnosis of cancer with a polynucleotide or with an antibody.

The inventions of groups I-VI and VII-XI are patentably distinct because they are drawn to methods that have distinct steps, require separate compositions for practice and produce different results. For example, the steps of treating an individual with cancer utilizing an polynucleotide cannot be used for a method of modulating the expression of a polynucleotide in a cell with dsRNA or for modulating the expression of a polynucleotide in a cell with antisense or identifying a polynucleotide in a cell or identifying a polypeptide in a cell or for treating cancer in an individual with antibody.

4. It is noted that various claims recite polynucleotide or polypeptide sequences in a table, column of a table, example, etc. Applicant is required to pick one specific polynucleotide sequence if the elected group entails a polynucleotide sequence. Similarly election of a one specific polypeptide is required if the elected group entails a polypeptide. It is emphasized that this is a restriction a distinct invention, not election of species.

5. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art shown by their different classification and their recognized divergent

subject matter, and because each invention requires a separate, non-coextensive search, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magdalene K. Sgagias whose telephone number is (571) 272-3305. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram R. Shukla, can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



RAM R. SHUKLA, PH.D.  
SUPERVISORY PATENT EXAMINER

Magdalene K. Sgagias, Ph.D.  
Patent Examiner  
Art Unit 1632